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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,920	04/26/2001	Erin H. Sibley	PD-201030A	2072

7590 07/30/2004

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EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 07/30/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/844,920

Applicant(s)

SIBLEY ET AL.

Examiner

THUAN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuller et al. (US Patent 5,729,279).

Regarding claim 13, Fuller discloses "a method of distributing electronic content" (Fig. 1) comprising the steps of: "coupling electronic content to a redistribution device; receiving the electronic content from the redistribution device; over-the-air broadcasting at least a portion of the electronic content from the redistribution device", i.e., digital broadcast electronic content are stored in a distribution center 104 and an uplink facility 102 generates a broadcast signal having digital electronic content or digital programming signals broadcasting to a plurality of downlink facilities 108, 110 & 112 via satellite links as means for over-the-air coupling or broadcasting to redistribution device 108, 110 & 112, and these devices receive the electronic content or digital programming services (Fuller, Fig. 1, and col. 8/line 64 to col. 9/line 1), the distribution network 204 receives and transmits the rebroadcast signal over the air using RF signals (Fuller, Figs. 2 & 4, col. 9/line 54 to col. 10/line 30, and "receiving the over-the air broadcast electronic content through a user appliance", i.e., the user at user appliance 210 receives the electronic content or digital programming using the RF system and the MATV system (Fig. 2, col. 9/line 54 to col.10/line 30 and col. 10/lines 13-30).

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As for claim 14, in further view of claim 13, Fuller further discloses "wherein the step of receiving over-the-air broadcasting comprises over-the-air broadcasting from a base station", i.e., Fuller suggests that system using RF signals and MATV system (master antenna TV) for transmitting and receiving electromagnetic waves broadcasting in spaces or over-the-air in addition to optical fiber cable (Fuller, col. 9/line 54 to col. 10/line 30).

As for claim 15, in further view of claim 13 above, Fuller further discloses "wherein the step of over-the-air broadcasting comprises forming a local area network with the user appliance", i.e., over-the air broadcasting from satellite 106 down to a facility 108 (Fig. 2) forming a local area network 404 within the distribution network 204 with the user appliance 210 (Figs. 2 & 4, and col. 13/line 39 to col. 14/line 24 for LAN 404 addressed).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (U.S. Patent No. 5,729,297) in view of Dillon et al. (US Patent No. 6,430,233 B1).

Regarding claim 1, Fuller discloses "a system of distributing electronic content" (Fig. 1) comprising: "a network operations center generating a broadcast signal having digital electronic content", i.e., digital broadcast electronic content are stored in a distribution center 104 and an uplink facility 102 regarding as a network operations center generates a broadcast signal having digital electronic content or digital programming signals to a plurality of downlink facilities 108,

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110 & 112 (Fuller, Fig. 1, and col. 8/line 64 to col. 9/line 1); "a communication backbone coupled to said network operations center", i.e., a communication network 100 or communication backbone coupled to the network distribution facility 102 using satellite links (as illustrated in Fig. 1, and col. 8/line 64 to col. 9/line 25); "a base station receiving said broadcast signal from said backbone and forming a wireless local area network", i.e., a facility 108 serves as a base station in receiving the broadcast signal from the distribution network 100 (Fig. 2, and col. 9/lines 25-53); "said base station over-the air rebroadcasting at least a portion of said broadcast signal as a rebroadcast signal using said wireless local area network", i.e., using a redistribution network 204 and a local area network 404 part of redistribution network 204, the facility 108 or base station 108 redistributes at least a portion of the broadcast signal to other user terminals 208 as a rebroadcast signal (Figs. 2 & 4, and col. 9/line 54 to col. 10/line 30 as a special-pay per-view program as a portion of the broadcast signal because not all users will receive all available programs, but they have to do a special order in receiving a part of available programs, and col. 13/line 57 to col. 14/line 25 for network 204 and a local area network 404); and a user appliance positioned with said local area network and receiving said rebroadcast signal, i.e., user appliance 210 coupled to terminal 208 within the local area network of distribution network 204 receives the rebroadcast signal over the air using RF signals (Fuller, Figs. 2 & 4, col. 9/line 54 to col. 10/line 30, and col. 10/lines 9-47 & col. 13/line 57 to col. 14/line 40).

Fuller does not address that Fuller's system further specify the term "a wireless local area network" within that local area network as addressed but furthermore, in a same environment in receiving digital satellite broadcast services (Dillon, Fig. 1, and col. 6/line 50 to col. 7/line 20), Dillon further teaches that at the user terminal side or at the satellite data receiver within the receiving station comprising a group of terminals (as illustrated in Fig. 9), one can use

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a plurality of network interfaces within the satellite data receiver in order to communicate with other networks such as a wireless local area network or wireless LAN (Dillon, col. 8/lines 44-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller's technique of providing a local area network either for wireless or wireline for users to communicate to each other in a small local area network with Dillon's teaching technique of upgrading to a wireless local area network with the network interfaces as addressed in order to expand the capability of broadcast system in term of bandwidth and data rates in redistributing the broadcast signals or digital programming services to other networks such as a wireless LAN comprising wireless terminals or wireless devices as preferred.

As for claim 2, in view of claim 1, Fuller further discloses comprising "a television coupled to said base station, said television receiving at least a portion of said rebroadcast signal", i.e., a television 210 coupled to the base station or the facility 108 (Fig. 2), and a special-pay per-view program as a portion of the broadcast signal addressed because not all users will receive all available programs, but they have to do a special order in receiving a part of available programs (col. 9/line 54 to col. 10/line 30).

As for claim 3, in view of claim 1, Fuller discloses "wherein said base station forms said rebroadcast signal from said digital electronic content", i.e., video server 202 within the facility 108 continually updates and selects programs for rebroadcasting to users based on their requests or commands and the programming is digital video programming signals from the distribution center 104 (col. 8/line 64 to col. 9/line 14, and col. 12/line 37 to col. 13/line 21).

As for claims 4 and 5, in view of claim 1, Fuller further discloses "wherein said electronic content comprises digital audio signals" and "wherein said electronic content comprises video", i.e., digital video programming signals includes video and audio signals (col. 3/lines 15-29, col.

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6/lines 27-40 & col. 7/lines 20-36 for an MPEG converter in handling digital video and digital audio signals).

As for claim 6, in view of claim 1, Fuller further discloses "wherein said backbone comprises a high altitude device, cable or fiber optic cable", i.e., a satellite is a high altitude device (Fig. 1/item 106) and fiber optical cable or cable trunks can be used for distribution network 204 (col. 9/line 54 to col. 10/line 8).

As for claims 7 and 8, in view of claim 6, Fuller discloses "wherein said high altitude device comprises a satellite" and inherently discloses "wherein said high altitude device comprises a stratospheric platform", i.e., a satellite must be a high altitude device and in a stratospheric platform (Fig. 1/item 106; and as admitted without further details in section 0016 of the specifications).

As for claim 9, in view of claim 1, Fuller further discloses "wherein said base station comprises an integrated receiver decoder", i.e., an integrated receiver decode IRD 200 is included within the facility 108 or referred to as the base station (Fig. 2/item 200, and col. 9/lines 25-35).

As for claim 10, in view of claim 1, Fuller further discloses "wherein said rebroadcast signal is a compressed signal", i.e., rebroadcast signal receiving or being relayed at downlink facility 108 is in the compressed form of MPEG signals (col. 9/lines 1-19).

As for claim 11, in view of claim 1, Fuller further discloses "wherein said backbone comprises a cable network" (col. 9/line 54 to col. 10/line 8, and col. 28/lines 29-52 as this technique is for use in cable television networks).

As for claim 12, in view of claim 1, Fuller further discloses "wherein said backbone comprises a fiber optic network" (col. 28/lines 29-52 as fiber optical cable transmission is included within the network).

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Regarding claim 16, the combination of Fuller and Dillon teaches “a method of distributing electronic content comprising the steps of: broadcasting a television signal as a electronic content; receiving the electronic content; digitally compressing the electronic content into a compressed signal; and over-the-air rebroadcasting the compressed signal using a wireless local area network” (see claim 1 above for the combined teaching of Fuller and Dillon, with a television signal as an electronic content addressed in Fuller’s, col. 3/lines 15-30 for cable television programming with video-on-demand broadcasting to TV users, and further in Fuller’s, col. 3/lines 39-54 for movies with digitally compressed delivering to TV set in customer’s room; and over-the-air issue concerned in Fuller, col. 9/line 54 to col. 10/line 36; and the teaching of Dillon for the “wireless local area network” or WLAN).

As for claim 17, in view of claim 16 above, Fuller discloses “comprising the steps of receiving the compressed signal at a user appliance” (see col. 3/lines 39-54 for compressed signal delivered to customer’s TV set).

As for claim 18, in view of claim 16, Fuller further discloses “wherein the step of receiving comprises the steps of digitally decompressing the digital video stream, and displaying the video stream”, i.e., digital compressed video are encoded at video server and then later being decoded or decompressing, for instance, with an MPEG decoder, into an RF format or as baseband video signals that users can view on their display TV set (col. 4/lines 22-31 & col. 6/lines 15-27).

5. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (U.S. Patent No. 5,729,297) in view of Dillon et al. (US Patent No. 6,430,233 B1) and Hylton et al (US Patent No. 5,708,961/ or “Hylton”).

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Regarding claim 19, Fuller discloses a base station (Fig. 2) comprising: a receiving antenna for receiving electronic content (antenna 108a for receiving electronic content from distribution center 102&104); compression software for compressing the electronic content into a compressed signal, i.e., a systems control computer 206 oversees the operation (Fuller, col. 9/lines 45-53) and uses MPEG converter 602 for encoding the electronic content into a compressed signal in MPEG formats (Fuller, Fig. 6, and col. 19/lines 20-65).

Fuller does not clearly further show the step of “a transmitting area network antenna; and a wireless local area network interface coupled to the transmitting area network antenna and broadcasting the compressed signal through the transmitting area network antenna as a rebroadcast signal”; however, in a same environment in receiving digital satellite broadcast services (Dillon, Fig. 1, and col. 6/line 50 to col. 7/line 20), Dillon further teaches that at the user terminal side or at the satellite data receiver within the receiving station comprising a group of terminals (as illustrated in Figs. 8 & 9), one can use a plurality of network interfaces within the satellite data receiver of the receiving station in order to communicate with other networks such as a wireless local area network or wireless LAN, or over-the-air broadcasting from that receiving base station (Dillon, col. 8/lines 44-67). Dillon teaches to include a wireless LAN but does not show to have “a transmitting area network antenna” at the base station as claimed; however, Hylton in a wireless on-premises video distribution system further teaches to include a base station broadcasting to a plurality of wireless devices uses a transmitting area network antenna 27 for providing video services to a plurality of terminals 100 with antennas 29 (Hylton, Fig. 1, and col. 8/lines 5-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller’s technique of providing a local area network for users to communicate to each other in a small local network with Dillon’s teaching technique of upgrading to a wireless local area network or over-the-air broadcasting with the

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network interfaces together with a transmitting area network antenna at the base station controller 10 as taught by Hylton, as a needed tool for communicating such as exchanges signaling messages between the controller 19 from the base station processing system 10 and terminals 100 as addressed in order to expand the capability of broadcast system in term of bandwidth and data rates in redistributing the broadcast signals or digital programming services to other networks such as a wireless LAN comprising wireless terminals or wireless devices as preferred.

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Response to Arguments

6. Applicant's arguments filed on 10/01/03 have been fully considered but they are not persuasive.

Applicants mainly argues that the network 204 of Fuller reference does not suggest a wireless or over-the air system, and it is "a wired system that uses microwaves or RF that are broadcast through the wires or optical that exist within a hotel" (Remarks, page 9 of 11). The Examiner respectfully believes that applicants are in error by this statement. By the definition of Newton's Telecom, a radio frequency or a RF is a group of electromagnetic waves transmitted in the range of 500kHz and 300GHz, and electromagnetic waves are propagated through space, or in other terms, "over-the-air" or "wireless". Applicants accidentally misread the paragraph of Fuller in column 9, line 54 to column 10, line 30. Fuller discloses that "the network 204 is a radio frequency (RF) network...." and "...moreover, it is possible that the network 204 could be constructed using fiber optical cable." Fuller clearly suggests that the network 204 can use RF signals for transmitting and receiving electromagnetic waves broadcasting in spaces or over-the-air in addition to optical fiber cable.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, since Fuller suggests a video distribution system within a local area network, and this system can be applied in either a wireless or a wired system, the teaching of Dillon comes into place as an obvious modification for adding or expanding more bandwidths

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and data rates into the existing system, because wireless local area network or WLAN is well known for using low microwave frequencies (lower than about 10 GHz) but can provide data rates as high as 10 Mbits/sec. Dillon's reference is also within the field of providing video programs to users using a satellite for broadcasting same as Fuller's. Thus, the combination of Fuller and Dillon is a proper and valid combination herein.

Therefore, the Examiner disagrees with the Applicants' arguments and stands with the disclosure and teaching of Fuller, Dillon, and Hylton as previously disclosed in the non-final office action and discussed in this revised Final Office Action.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

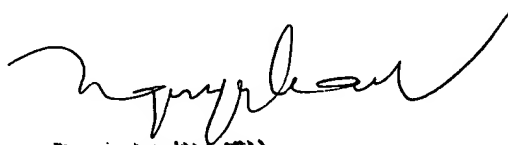
Hand-delivered responses should be brought to Crystal Park II,

2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



TONY T. NGUYEN
PATENT EXAMINER, FSA

Tony T. Nguyen
Art Unit 2685
July 20, 2004